Why University Athletes Choose Not to Reveal Their Concussion Symptoms During a Practice or Game

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Objective: To determine why athletes decide not to seek medical attention during a game or practice when they believe they have suffered a concussion.

Design: A retrospective survey.

Setting: University Sport Medicine Clinic.

Participants: A total of 469 male and female university athletes from several varsity team sports were participated in the study.

Main Outcome Measures: Athletes were surveyed about the previous 12 months to identify specific reasons why those athletes who believed they had suffered a concussion during a game or practice decided not to seek attention at that time, how often these reasons occurred, and how important these reasons were in the decision process.

Results: Ninety-two of the 469 athletes (19.6%) believed they had suffered a concussion within the previous 12 months while playing their respective sport, and 72 of these 92 athletes (78.3%) did not seek medical attention during the game or practice at least once during that time. Sports in which athletes were more likely to not reveal their concussion symptoms were football and ice hockey. The reason "Did not feel the concussion was serious/severe and felt you could still continue to play with little danger to yourself," was listed most commonly (55/92) as a cause for not seeking medical attention for a presumed concussion.

Conclusions: A significant percentage of university athletes who believed they had suffered a concussion chose not to seek medical attention at the time of injury. Improved education of players, parents, and coaches about the dangers of continuing to play with concussion symptoms may help improve reporting.

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Clinical Relevance: Medical staff should be aware that university athletes who believe they have suffered a concussion may choose not to volunteer their symptoms during a game or practice for a variety of personal and athletic reasons.

Key Words: concussion, symptoms, team sports, university, reasons

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INTRODUCTION

Concussions are a common occurrence in sport. Some estimates have suggested that almost 3 million sport or recreation-related concussions occur each year in the United States.¹ Not all concussions are recognized, diagnosed, and treated.² It is believed that a significant number of sport concussions go unrecognized or undiagnosed.³ Rapidly identifying, evaluating, and managing athletes who have suffered a concussion or more severe brain injury is vital. Clinicians who identify and treat these athletes must address immediate safety concerns such as ruling out serious intracranial pathology, intermediate concerns such as managing concussion symptoms and neurocognitive impairment, and long-term concerns such as safely managing the return to play process in these athletes.

It is well known that many athletes do not volunteer their symptoms once they have sustained a concussion. Possible reasons for not seeking medical attention range from not understanding they may have suffered a concussion, to deliberately choosing to not reveal their symptoms for fear of being prevented from playing their sport, or not wanting to be ostracized by teammates.^{4–10} Former professional hockey players who retired because of postconcussion symptoms revealed that they routinely hid their symptoms from teammates, coaches, and medical professionals to continue playing.¹¹ Many were only removed from competition by their coaches and medical professionals when they were no longer able to hide their concussion symptoms. The Concussion in Sport Group recommends that all athletes experiencing any signs or symptoms from a concussion be removed from play that day, monitored to ensure symptoms do not worsen, and be medically evaluated and monitored during a stepwise return to play process.^{2,12,13} Athletes who continue to play while symptomatic from a concussion are believed to be at risk for more severe injury, including second-impact syndrome, and repeated concussions may also result in progressive and cumulative neurologic and neuropsychological impairment.¹⁴⁻¹⁸ Research has also shown that athletes who

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